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10/620,685	07/17/2003	Akio Tajima	N03404US	9634

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EXAMINER	
LEUNG, CHRISTINA Y	
ART UNIT	**PAPER NUMBER**
2613	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/620,685	TAJIMA, AKIO	
	Examiner	Art Unit	
	Christina Y. Leung	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 September 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) *4-12,16-24 and 27-32* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,13-15,25 and 26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Embodiment 1, directed to **claims 1-3, 13-15, 25, and 26** in the reply filed on 26 September 2008 is acknowledged.

2. **Claims 4-12, 16-24, and 27-32** are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected embodiments, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 26 September 2008.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. **Claims 1-3, 13-15, 25 and 26** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Independent **claims 1 and 13** each recite "wherein said transmitting and receiving communication lines comprise primary communication lines unreserved for exclusive communication when a failure has occurred in one of said transmitting and receiving communication lines" in the last lines of the claims. Similarly, independent **claim 25** recites "wherein said plurality of optical signal communication lines comprise primary communication lines unreserved for exclusive communication when a failure has occurred in said one of said

plurality of said optical signal communication lines" in the last lines of claim 25. Examiner respectfully submits that Applicant's originally filed specification does not clearly describe how the communication lines are specifically "unreserved for exclusive communication when a failure has occurred" as recited in these claims.

Claims 2, 3, 14, 15, and 26 depend on claims 1, 13, or 25, and are therefore also are rejected under 35 U.S.C. 112, first paragraph, for the above reason.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 1-3 and 13-15** are rejected under 35 U.S.C. 102(e) as being anticipated by **Oberg et al.** (US 2005/0084262 A1).

Regarding **claim 1**, Oberg et al. disclose a communication node (Figure 8) comprising:

an optical signal transceiver having at least one optical signal transmitting device (transmitter 15 in Node B) and at least one optical signal receiving device (power monitor 37, also in Node B) to transmit and receive an optical signal to and from an opposite communication node (transmitter 15 transmits signals to Node A, while power monitor 37 receives signals from Node A);

at least one optical signal transmitting communication line 1a to transmit an optical signal to the opposite communication node;

at least one optical signal receiving communication line 1b to receive an optical signal from the opposite communication node; and

a switching device 33 including at least two bi-directional ports, the switching device being connected to the optical signal transmitting device and to the optical signal receiving device to transmit,

such that when no failure has occurred in the optical signal transmitting communication line and in the optical signal receiving communication line, an optical signal fed from the optical signal transmitting device 15 to the optical signal transmitting communication line 1a and to transmit an optical signal fed from the optical signal receiving communication line 1b to the optical signal receiving device (power monitor 37; i.e., switching device 33 is in a bar state),

when a failure has occurred in the optical signal transmitting communication line 1a, the switching device switches so that the optical signal fed from the optical signal transmitting device is transmitted via one of the at least two bi-directional ports to the optical signal receiving communication line (Oberg et al. disclose that the switching device 33 changes to a cross state; column 6, paragraph [0081]),

wherein the transmitting and receiving communication lines comprise primary communication lines unreserved for exclusive communication when a failure has occurred in one of the transmitting and receiving communication lines (Oberg et al. disclose using switching device 33 to change the signals on the communication lines 1a and 1b and therefore disclose that the lines are "unreserved for exclusive communication").

Further regarding claim 1, Oberg et al. does not specifically mention failure in the optical signal receiving communication line 1b in the system disclosed in Figure 8, but Examiner

respectfully submits that Oberg et al. clearly disclose a system comprising the same structure recited in claim 1. A claim containing a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all the structural limitations of the claim. Claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. See MPEP 2114. The switching device 33 disclosed by Oberg et al. is clearly capable of switching so that the optical signal to be fed to the optical signal receiving device (power monitor 37) is received via an other of the at least two bi-directional ports from the optical signal transmitting communication line. Specifically, when switching device 33 is changed to a cross state, the transmitting line 1a is connected to power monitor 37 via a different bi-directional port.

Regarding **claim 13**, Oberg et al. disclose a switching device (2 x 2 switch 33 in Node B shown in Figure 8) being connected to an optical signal transceiver comprising at least one optical signal transmitting device (transmitter 15 in Node B) and at least one optical signal receiving device (power monitor 37) to transmit and receive an optical signal to and from an opposite communication node (i.e., Node A) and making up a communication node (i.e., Node B) with the optical signal transceiver,

the switching device 33 including at least two bi-directional ports, the switching device configured to be connected to at least one piece of an optical signal transmitting communication line 1a to transmit an optical signal to the opposite communication node, at least one piece of an optical signal receiving communication line 1b to receive an optical signal from the opposite communication node, the optical signal transmitting device and the optical signal receiving device; and

wherein, when no failure has occurred in the optical signal transmitting communication line 1a and in the optical signal receiving communication line 1b, an optical signal fed from the optical signal transmitting device 15 is transmitted to the optical signal transmitting communication line 1a and an optical signal fed from the optical signal receiving communication line 1b is transmitted to the optical signal receiving device (power monitor 37; i.e., switching device 33 is in a bar state and transmitter 15 transmits signals to Node A via line 1a, while power monitor 37 receives signals from Node A via line 1b) and

wherein, when a failure has occurred in the optical signal transmitting communication line 1a, switching is done so that the optical signal fed from the optical signal transmitting device is transmitted via one of the at least two bi-directional ports to the optical signal receiving communication line (Oberg et al. disclose that the switching device 33 changes to a cross state; column 6, paragraph [0081]);

wherein the transmitting and receiving communication lines comprise primary communication lines unreserved for exclusive communication when a failure has occurred in one of the transmitting and receiving communication lines (Oberg et al. disclose using switching device 33 to change the signals on the communication lines 1a and 1b and therefore disclose that the lines are "unreserved for exclusive communication").

Further regarding claim 13, as similarly discussed above with regard to claim 1, Oberg et al. does not specifically mention failure in the optical signal receiving communication line 1b in the system disclosed in Figure 8, but Examiner respectfully submits that Oberg et al. clearly disclose a system comprising the same structure recited in claim 1. A claim containing a recitation with respect to the manner in which a claimed apparatus is intended to be employed

does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all the structural limitations of the claim. Claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. See MPEP 2114. The switching device 33 disclosed by Oberg et al. is clearly capable of switching so that the optical signal to be fed to the optical signal receiving device (power monitor 37) is received via an other of the at least two bi-directional ports from the optical signal transmitting communication line. Specifically, when switching device 33 is changed to a cross state, the transmitting line 1a is connected to power monitor 37 via a different bi-directional port.

Regarding **claims 2 and 14**, Oberg et al. disclose that wavelengths of optical signals transmitted from all the optical signal transmitting devices being placed in the optical signal transceiver are different from one another and from wavelengths of optical signals transmitted from the opposite communication node (page 5, paragraph [0066]; see also page 8, claim 2 of Oberg et al.)

Regarding **claims 3 and 15**, Oberg et al. disclose that the switching device includes an optical switch that enables an optical signal to be transmitted in bidirectional directions (Figure 8 shows how signals can travel bidirectionally through switching device 33).

Allowable Subject Matter

7. **Claims 25 and 26** may contain allowable subject matter, but they are rejected under 35 U.S.C. 112, first paragraph, as discussed above and are not currently allowed.

8. The following is a statement of reasons for the indication of possibly allowable subject matter:

The prior art, including Oberg et al., Sugawara et al. (US 2002/0044315 A1; cited in the previous Office action), and Chaudhuri et al. (US 2003/0170020 A1; cited in the previous Office action), does not specifically disclose or fairly suggest a system including the particular combination all of the elements and limitations having the specific connections and relationships as recited in claims 25 and 26.

Response to Arguments

9. Applicant's arguments filed 17 April 2008 with respect to claims 25 and 26 in particular (pages 26-28 of the response)have been fully considered and are persuasive. The 35 U.S.C. 103(a) rejection of claims 25 and 26 has been withdrawn. However, upon further consideration, claims 25 and 26 have been rejected over 35 U.S.C. 112, first paragraph, as discussed above.

10. Applicant's arguments with respect to claims 1-3 and 13-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Y. Leung, whose telephone number is 571-272-3023. The examiner can normally be reached on Monday to Friday, 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached at 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christina Y. Leung/

Primary Examiner, Art Unit 2613